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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,174	12/15/2003	Abdlmonem H. Beitelmal	200312051-1	2155

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EXAMINER

DUONG, THO V

ART UNIT PAPER NUMBER

3753

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/734,174	<b>Applicant(s)</b> BEITEIMAL ET AL.	
	<b>Examiner</b> Tho v. Duong	<b>Art Unit</b> 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 32-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/15/03</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 1-10 and 32-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 8/30/06.

Applicant's election with traverse of group II in the reply filed on 8/30/06 is acknowledged. The traversal is on the ground(s) that the claims can be examined at the same time without serious burden. This is not found persuasive because the basis for the restriction is that each group are patentable distinct and belong to two separate classifications, one is 165/185 and the other is 361/704.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-13, 16-22, 24, 25 and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US 6,466,441). Suzuki discloses (figures 2-4, 7, 9 and column 5, lines 15-26) an electronic system comprising a housing (10) having a first section and a second section (11, 12), wherein the first section is attachable to the second section; a cooling system having a

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base (15) and a plurality of fins configured to dissipate heat generated by the heat generating component (14A) attached to the first section; the cooling system being configured to contact the heat generating component when the first section and the second section are attached to each other; the cooling system includes one or more heat pipes or heat sinks (115c, 115d, 16, 17) having a different configuration from one another; the housing (10) includes a relatively open space around the heat generating component and wherein the cooling system occupies substantially all of the relative open space around the heat generating component; the plurality of fins are configured to have a relatively low height to width aspect ratio; and one or more fan (13) configured to blow air through the plurality of fins.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-15 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Hinshaw (US 4,884,331). Suzuki substantially discloses all of applicant's claimed invention as discussed above except for the limitation that the aspect ratio is between approximately 6 and 9 and a pressure drop of 0.03 and 0.09 inches of water. Hinshaw discloses (figure 2, column 3, lines 30-34 and column 4, lines 14-26) a heat sink that has a plurality of fins, wherein the aspect ratio of the fins is between 6 to 8 for a purpose of increasing the efficiency of fins on the heat sink. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Hinshaw's teaching in Suzuki's device for a purpose of

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increasing the efficiency of fins on the heat sink. Regarding to the pressure drop, the combination heat sink of Suzuki and Hinshaw discloses the claimed structure of low aspect ratio such as 6-8, which makes the heat sink capable of yielding a pressure drop as claimed.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Ohara (US 5,897,178) or Francis (US 6,128,194). Suzuki substantially discloses all of applicant's claimed invention as discussed above except for the limitation that the first section and the second section have a first and mating device. Ohara discloses (figure 2) a computer housing that has a first section and a second section (11,12), each has a respective mating devices (111 and 122) for a purpose securing the first and second sections together to form a housing. Similarly, Francis also discloses (figure 2) a housing that has a first section and a second sections (40,42), wherein each section has a mating device (86,62) for a purpose of securing the two sections together to form a housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use either teaching of Ohara or Francis in Suzuki's device for a purpose of securing the two sections together to form a housing.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tamura et al. (US 6,769,748) discloses an electronic device cabinet.

Suzuki (US 3,961,666) discloses a heat dispersion device for use in an electronic apparatus.

Romero et al. (US 5,915,463) discloses a heat dissipation apparatus.

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Kubo et al. (US 6,888,725) discloses an electronic device unit.

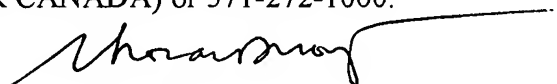
Seyama et al. (US 5,586,006) discloses a multi-chip module.

Wu et al. (US 2004/0196630A1) discloses a cooling system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keasel Eric can be reached on 571-272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tho v Duong  
Primary Examiner  
Art Unit 3753



TD

September 15, 2006